

TWO NEW SPECIES OF TRICHIOCAMPUS HARTIG (HYMENOPTERA, TENTHREDINIDAE) FROM CHINA

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Abstract Two new species of the genus *Trichiocampus* Hartig: *T. infumatus* sp. nov. and *T. fenestratus* sp. nov. are described from China. A key to known species of *Trichiocampus* from China is provided.

Key words Hymenoptera, Tenthredinidae, Nematinae, *Trichiocampus*, new species.

Trichiocampus Hartig, 1837 is a small genus of Tenthredinidae, which belongs to tribe Cladiini of subfamily Hoplocampinae. The genus includes 12 recognized species distributing in Holarctic Region. Four species have been recorded from China before this work (Xiao *et al.*, 1986; Huang and Wang, 1993; Wei and Nie, 1998; Wei *et al.*, 2006). Haris and Roller (1999) described *Trichiocampus yunnanensis* Haris *et* Roller, 1999 from Yunnan Province but the species is a member of *Anhoplocampa* Wei, 1998. Huang and Wong (1993) described *T. pseudoviminalis* Huang *et* Wang from Inner Mongolia but Wei and Nie (1998) treated it as a junior synonym of *Trichiocampus rufus* Verzhutskii, 1966.

Recently 3 specimens of *Trichiocampus* were collected from Henan and Hunan Provinces which represent 2 undescribed species of the genus. Here the two new species are described and illustrated. The type specimens of the new species are deposited in the Insect Collection of Central South University of Forestry and Technology, Changsha, China (CSCS).

Trichiocampus infumatus sp. nov. (Figs. 1–6)

Male. Length 5 mm (Fig. 1). Body and legs black, hind trochanter, apex of front femur, ventral side of fore tibia and of fore tarsus, middle tibia entirely and basal 3 tarsomeres pale brown, basal 5/6 of hind tibia whitish brown. Fore wing strongly infusate at basal 2/3 and subhyaline toward apex, veins dark brown, stigma blackish brown, vein C pale brown. Body hairs pale brown, antennal hairs black brown.

Clypeus very shallowly and roundly emarginated; malar space 1.5 times diameter of lateral ocellus; middle fovea oval, broad and shallow; frons weakly elevated, without wall and basin; interocellar furrow very short and punctiform, not extending to postocellar area; postocellar furrow very shallow, indistinct; lateral furrows straight and rather deep, slightly divergent backwards; postocellar area transverse and evenly elevated, 2 times as broad as long; POL: OOL: OCL =

9: 9: 6. Head behind eyes strongly narrowed, length of temple about one-third length of eye in dorsal view. Antenna distinctly shorter than thorax and abdomen together, flagellum strongly tapering toward apex and strongly compressed in basal half, third antennomere with a distinct basal protrusion about 0.4 length of it (Fig. 2). Mesoscutellum flat, posttergite long and flat, almost as long as length of a cenchrus; cenchri large, distance between them about half the length of each. Epicnemium quite narrow and flat, almost indistinct; pubescence on pectus and mesopleuron not continuous, a naked band present on lower part of mesepisternum. Head and thorax shining, impunctate, without fine surface sculpture, labrum, pronotum and abdominal tergites slightly coriaceous. Inner tibia spur of front leg simple, distinctly longer and broader than outer spur; front basitarsus much longer than following 3 tarsomeres together (30: 23); hind tibia 1.5 times length of hind femur and 1.2 times hind tarsus, 2 hind tibia spurs equal in length and about 1/3 length of hind basitarsus, hind basitarsus distinctly longer than 3 following tarsomeres combined (33: 25); claw slender with a short inner tooth about 1/3 length of apical tooth (Fig. 3). Eighth tergite strongly and triangularly protruding backward at middle. Subgenital plate longer than broad, round at apex. Harpe as in Fig. 4, gonolacinia as in Fig. 5, penis valve as in Fig. 6.

Female. Unknown.

Distribution. China (Henan, Hunan).

Etymology. The specific epithet refers to the strongly infusate forewing of the species.

Holotype ♂, Shaolin Temple (alt. 800 m), Dengfeng, Henan, 16 July 2002, JIANG Ji Gang. **Paratype** 1 ♂, Yanziping (28°59'N, 113°49'E; alt. 1330 m). Mt. Mufu, 14 July 2008, ZHANG Yuan.

Remarks. This new species differs from all other known species of the genus by the fore basitarsus and hind basitarsus both distinctly longer than following 3

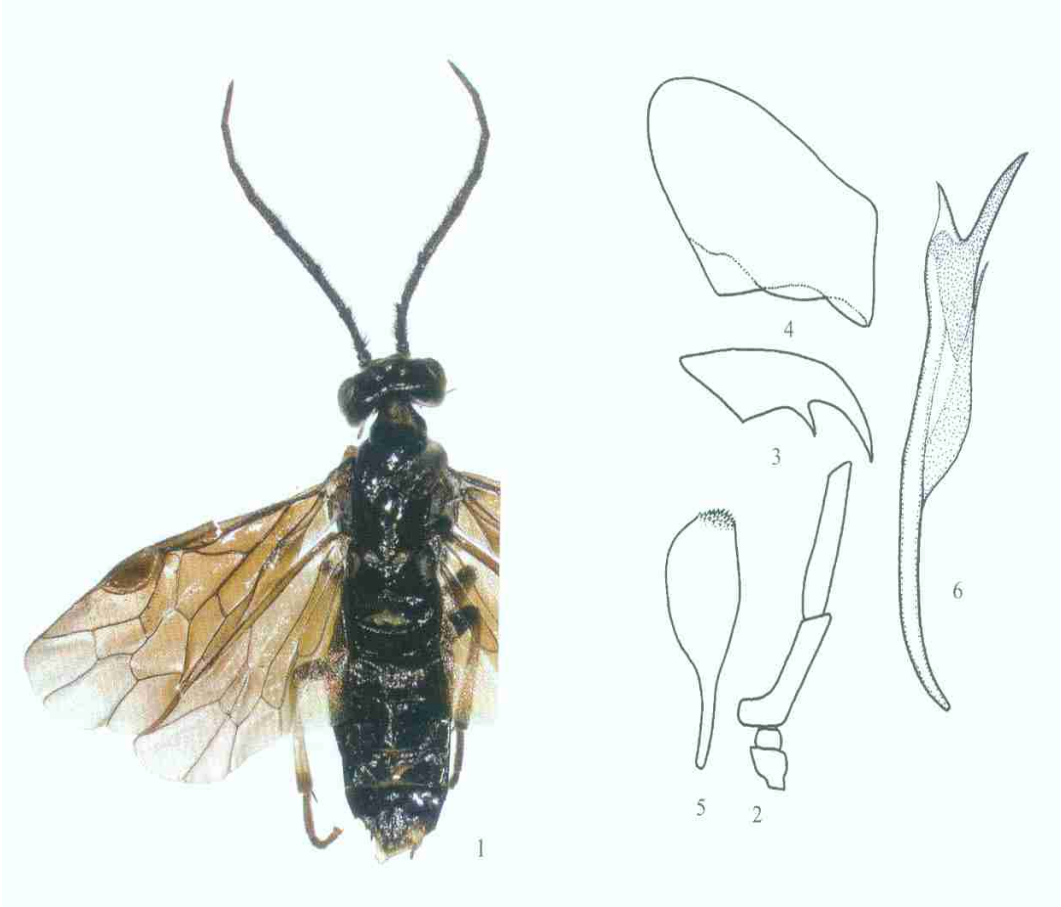
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tarsomeres together. The new species differs from *T. femoratinus* sp. nov. in the body black with tibiae mostly white, the forewing strongly infusate at basal 2/3, the posttergite almost as long as length of a cenchrus, the

postocellar area 2 times broader than long and the postocellar furrow indistinct, claw slender, as well as head strongly shining, without hair warts.

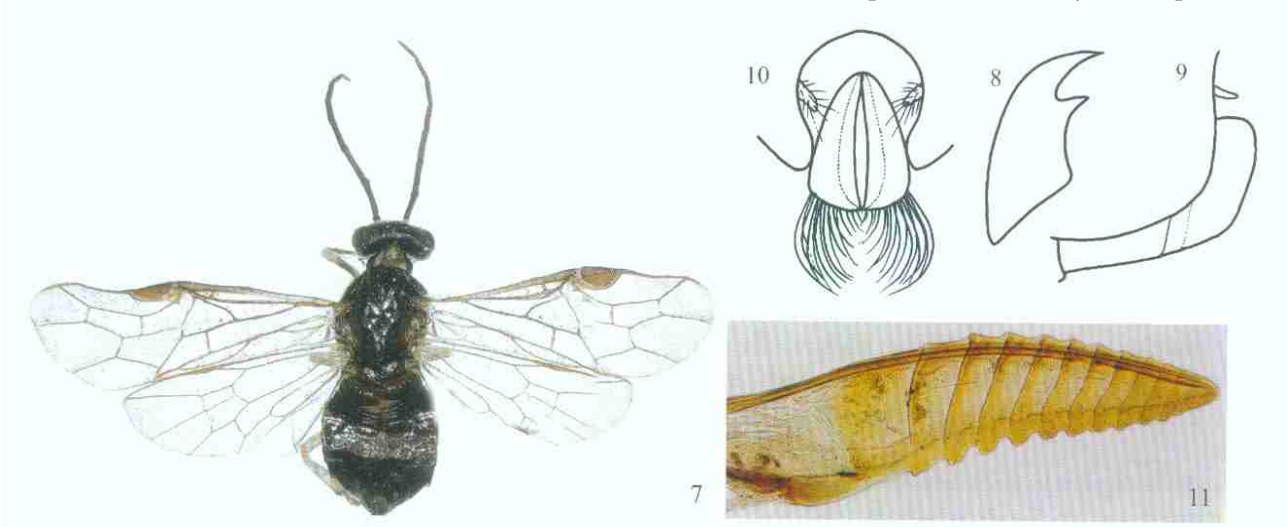


Figs 1-6. *Trichiocampus infumatus* sp. nov. 1. Adult male in dorsal view. 2. Basal 4 antennomeres. 3. Claw. 4. Harpe. 5. Gonolacinia. 6. Penis valve.

Trichiocampus femoratinus sp. nov. (Figs. 7-11)

Female. Length 5 mm (Fig. 7). Body black; legs white, fore coxae largely, extreme base of middle and of

hind coxae black, middle part of fore and middle femora distinctly infusate, apex of each tarsus dark brown. Wings hyaline, veins dark brown, stigma blackish brown, vein C pale brown. Body hairs pale brown



Figs. 7-11. *Trichiocampus femoratinus* sp. nov. 7. Adult female. 8. Claw. 9. Sheath in lateral view. 10. Sheath in dorsal view. 11. Lancet.

ventrally and dark brown dorsally, pilose on sheath silver brown.

Clypeus shallowly and roundly emarginated; malar space 1.8 times diameter of lateral ocellus; middle fovea very shallow and indistinct, almost absent; frons weakly elevated, with complete but low and obtuse front wall, front basin shallow; interocellar furrow broad and shallow, extending to anterior margin of postocellar area; postocellar furrow shallow but distinct and straight, lateral furrows rather deep, punctiform, distinctly divergent backwards; postocellar area evenly and feebly elevated, 3 times as broad as long; POL: OOL: OCL = 8: 8: 5. Head behind eyes strongly narrowed, about one fourth length of eye in dorsal view. Antenna simple, slightly shorter than thorax and abdomen together, distinctly tapering toward apex, third antennomere indistinctly shorter than fourth antennomere, without a basal protrusion. Mesoscutellum flat and polished, posttergite short and flat; about half as long as length of a cenchrus; cenchri large, distance between them about as long as length of each. Epicnemium flat and strongly shining, epicnemium suture indistinct; pubescence on pectus and mesopleuron not continuous, a naked band present on lower part of mesepisternum. Head shining with distinct hair warts, postorbit densely coriaceous; thorax shining, pronotum punctured; abdominal tergites feebly but distinctly coriaceous. Inner tibia spur of front leg simple, slightly longer and broader than outer spur; front basitarsus distinctly longer than following 3 tarsomeres together (19: 15); hind tibia 1.5 times length of hind femur and 1.3 times length of hind tarsus, hind tibia spurs subequal in length and about 2/5 length of hind basitarsus, hind basitarsus distinctly longer than 3 following tarsomeres combined (23: 17); claw short and broad, with a small inner tooth about 1/2 length of apical tooth (Fig. 8). Sheath in lateral view as in Fig. 9, and in dorsal view as in Fig. 10; lancet with 12 serrulae and annuli, upper 1/5 of annuli 1-6 with obtuse teeth, other part of annuli simple without any tooth, basal serrulae each with two large and round teeth (Fig. 11).

Male. Unknown.

Distribution. China (Henan).

Etymology. The specific epithet refers to the entirely white hind femur of the new species.

Host. Unknown.

Holotype ♀, Baligou (950m), Huixian, Henan Province, 13 July 2002, JIANG Ji-Gang.

Remarks. This new species differs from *T. infumatus* in legs almost entirely white, the wings

hyaline, the posttergite short and about half length of a cenchrus, the postocellar area 3 times broader than long and the postocellar furrow distinct, claw short and broad, as well as head with distinct hair warts.

Key to species of *Trichiocampus* from China

1. Fore and hind basitarsi distinctly shorter than 3 following tarsomeres together 2
Fore and hind basitarsi longer than 3 following tarsomeres together 5
2. Serrula with fine subbasal teeth; claw with inner tooth longer than half length of apical tooth 3
Serrula simple, without fine subbasal tooth; inner tooth of claw absent, if present then inner tooth shorter than half length of apical tooth 4
3. Body black; annuli and serrulae strongly condensed toward apex
..... *T. pruni* **Takeuchi, 1956**
Abdomen yellowish orange; serrulae not condensed toward apex
..... *T. rufus* **Verzhutskii, 1966**
4. Female thorax yellowish brown; 3rd antennomere in male simple; claw simple, without inner tooth *T. cannalis* **Xiao et Huang, 1986**
Thorax black, 3rd antennomere in male with a basal protrusion; claw with an inner tooth *T. grandis* (**Audinet Serville, 1823**)
5. Legs white, four front coxae and femora partly blackish brown; wings hyaline, postocellar area about 3 times as broad as long, lateral furrows short and strongly divergent backwards *T. femoratus* **sp. nov.**
Legs with all coxae, femora and hind tarsi black, all tibiae mostly white; wings strongly infusate; lateral furrows long and subparallel to each other, postocellar area about 2 times as broad as long
..... *T. infumatus* **sp. nov.**

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中国筒栉叶蜂属（膜翅目，叶蜂科）二新种

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摘 要 记述采自河南和湖南省的叶蜂科突瓣叶蜂亚科 2 新种：烟翅筒栉叶蜂 *Trichiocampus infumatus* sp. nov. 和淡足筒栉叶蜂 *Trichiocampus femoratus* sp. nov.。编制了筒栉叶蜂属中国已知种的分种检索表。新种模式标本保存于中南林业科技大学昆虫模式标本室。

烟翅筒栉叶蜂，新种 *Trichiocampus infumatus* sp. nov. (图 1 ~ 6)

本种前足和后足基跗节均显著长于其后 3 个跗分节之和，与本属已知种类均不相同（已知种类前后足基跗节均明显短于其后 3 跗分节之和）。本种与白股筒栉叶蜂 *Trichiocampus femoratus* 的区别为：足黑色，仅胫节大部浅黄褐色，前翅深烟褐色，中胸小盾片附片很大，几乎等长于淡膜区长径，头部背侧光泽强，无毛瘤，单眼后区宽 2 倍于长，侧沟细长，向后微弱分歧，单眼后沟不明显，爪较窄长。

词源：本种拉丁名种加词意为“烟熏色”的，指本种前

关键词 膜翅目，叶蜂科，筒栉叶蜂属，新种，中国。

中图分类号 Q969.542.6

翅呈深烟褐色。

正模 ♂，河南登封少林寺，800 m，2002-07-16，姜吉刚。副模 1 ♂，南幕阜山燕子坪（28°58' N, 113°49' E），海拔 1330 m，2008-07-14，张媛。

白股筒栉叶蜂，新种 *Trichiocampus femoratus* sp. nov. (图 7 ~ 11)

本种前足和后足基跗节均显著长于其后 3 个跗分节之和，与本属已知种类均不相同，近似于烟翅筒栉叶蜂 *Trichiocampus infumatus*，但足大部浅黄褐色，前翅透明，中胸小盾片附片较小，仅约等长于淡膜区长径的 1/2，头部背侧具显著毛瘤，单眼后区宽 3 倍于长，侧沟短点状，向后显著分歧，单眼后沟明显，爪小且短宽。

词源：本种后足股节黄白色，以此命名。

正模 ♀，河南辉县八里沟，950 m，2002-07-13，姜吉刚。

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